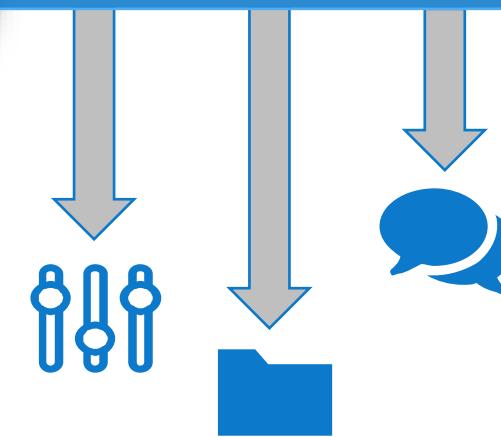
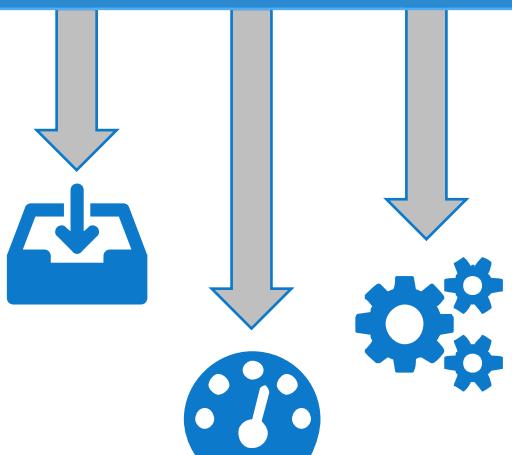


Topic 11

Risk and Regulation

AFIN8014
FinTech and Innovation



Learning Objectives

An Overview

An overview of regulations in financial markets

Tradeoff

Analyze the balance between regulation and innovation and its tradeoffs

FinTech Regulations

Evaluate regulatory issues of FinTech

RegTech

Explore RegTech: the definition and its relations with FinTech

Regulations in Financial Market

Globally, legal frameworks are unique for each jurisdiction

Regulations Based on Arears of Financial Industry

Stock
exchanges

Listed
company

Investment
management

Banks and
financial
service
providers

Regulations in Financial Market

Financial markets is highly regulated

There are numerous of legislations, rules, and standards that control, monitor, and protect consumers, merchants, banks, and the banking system.

What drives the changes of regulation?

INCREASING COMPETITING



CUSTOMER PROTECTION



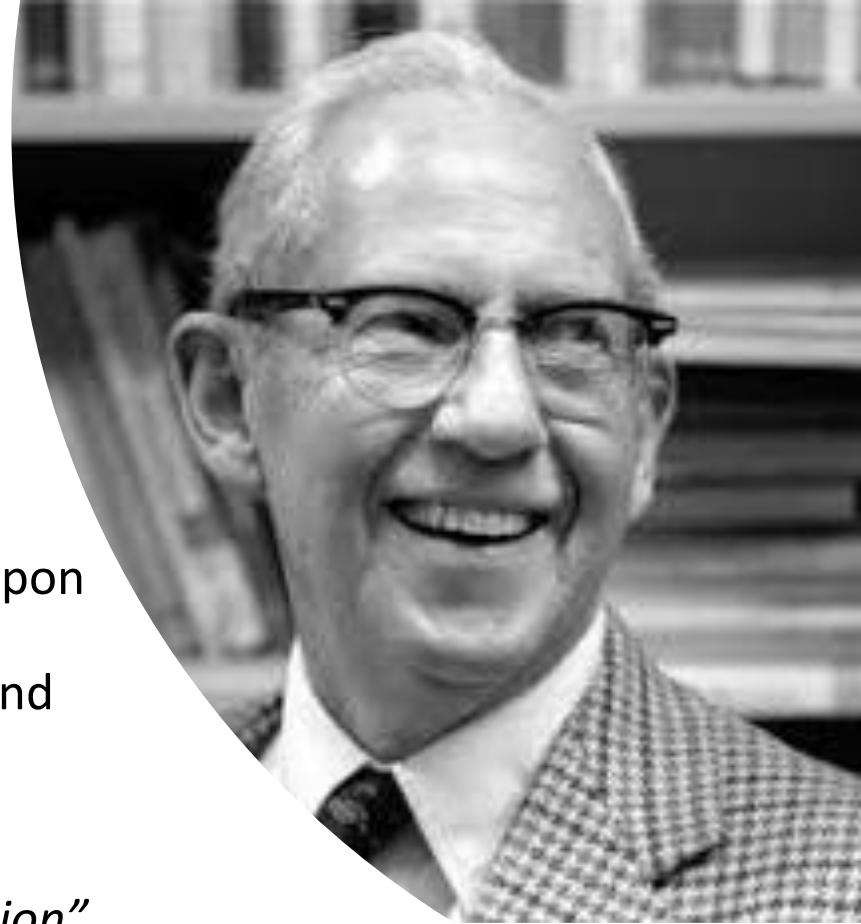
CRIME PREVENTATION



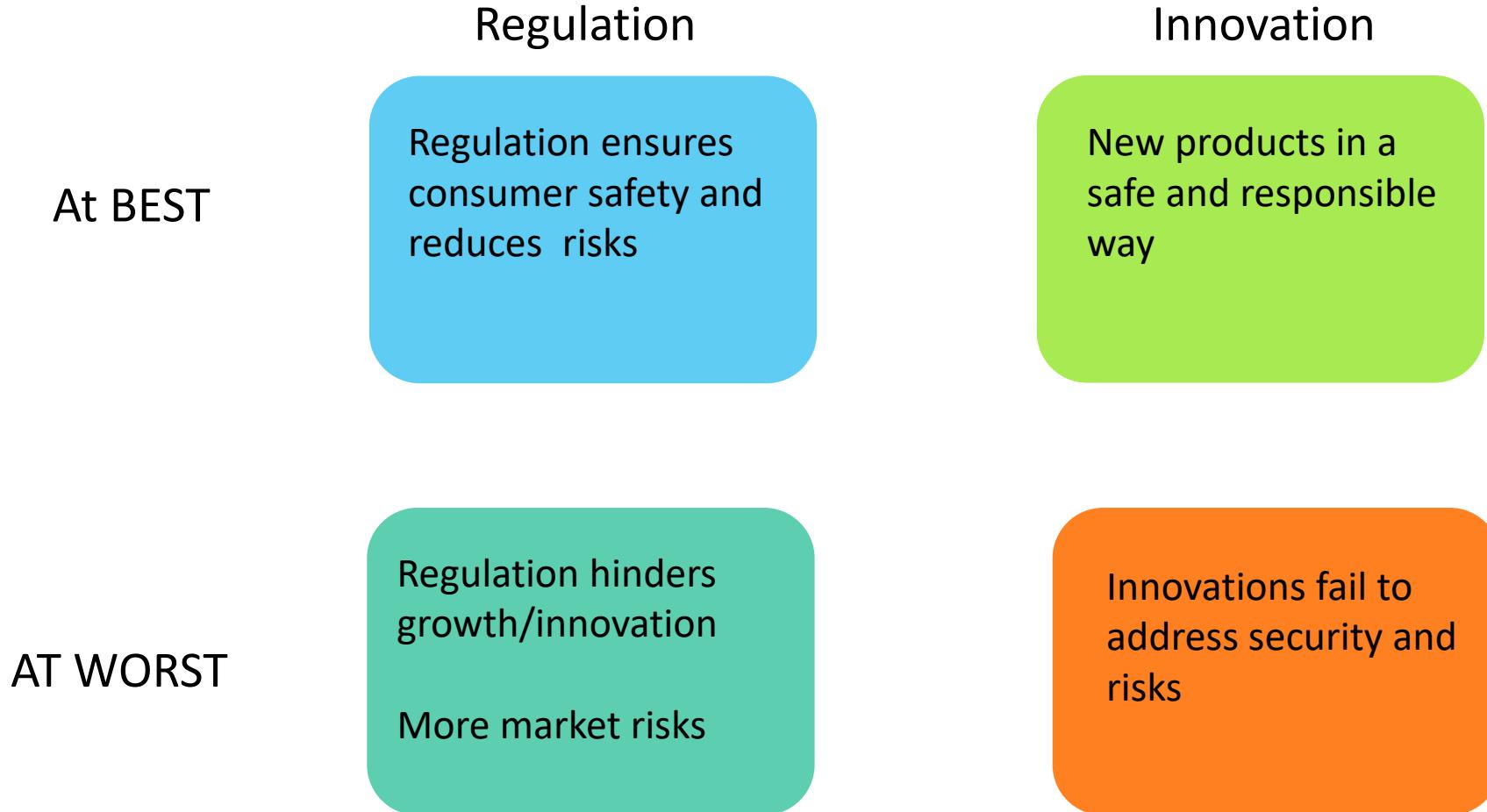
Regulation in Financial Market

“Regulation may be actively sought by an industry, or it may be thrust upon it...as a rule, regulation is acquired by the industry and is designed and operated primarily for its benefit. At worst, regulation hinders growth and innovation through bureaucracy.”

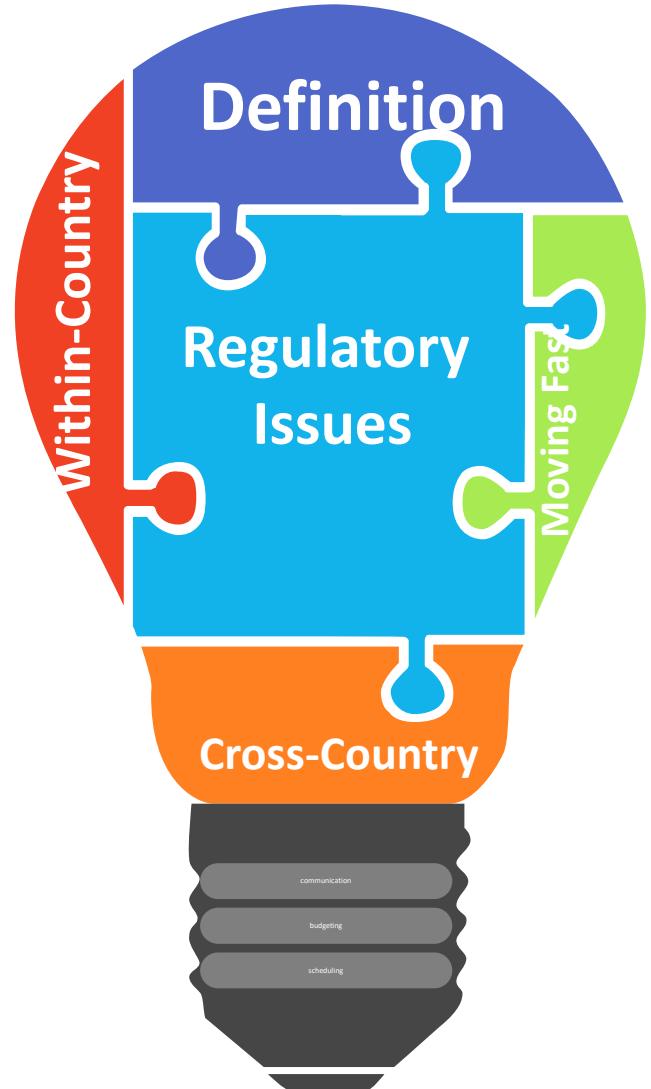
by George Stigler, Economist, “The Theory of Economic Regulation”



Regulation-Innovation Tradeoff



Regulatory Issues of FinTech



Definition

FinTech is hard to define.



Moving Fast

Technologies are fast-moving.



Cross-Country Regulation

The cross-country regulatory jurisdiction is unclear.



Within-Country Regulation

The within-country regulatory jurisdiction can also be unclear.



Regulations in Key FinTech Areas

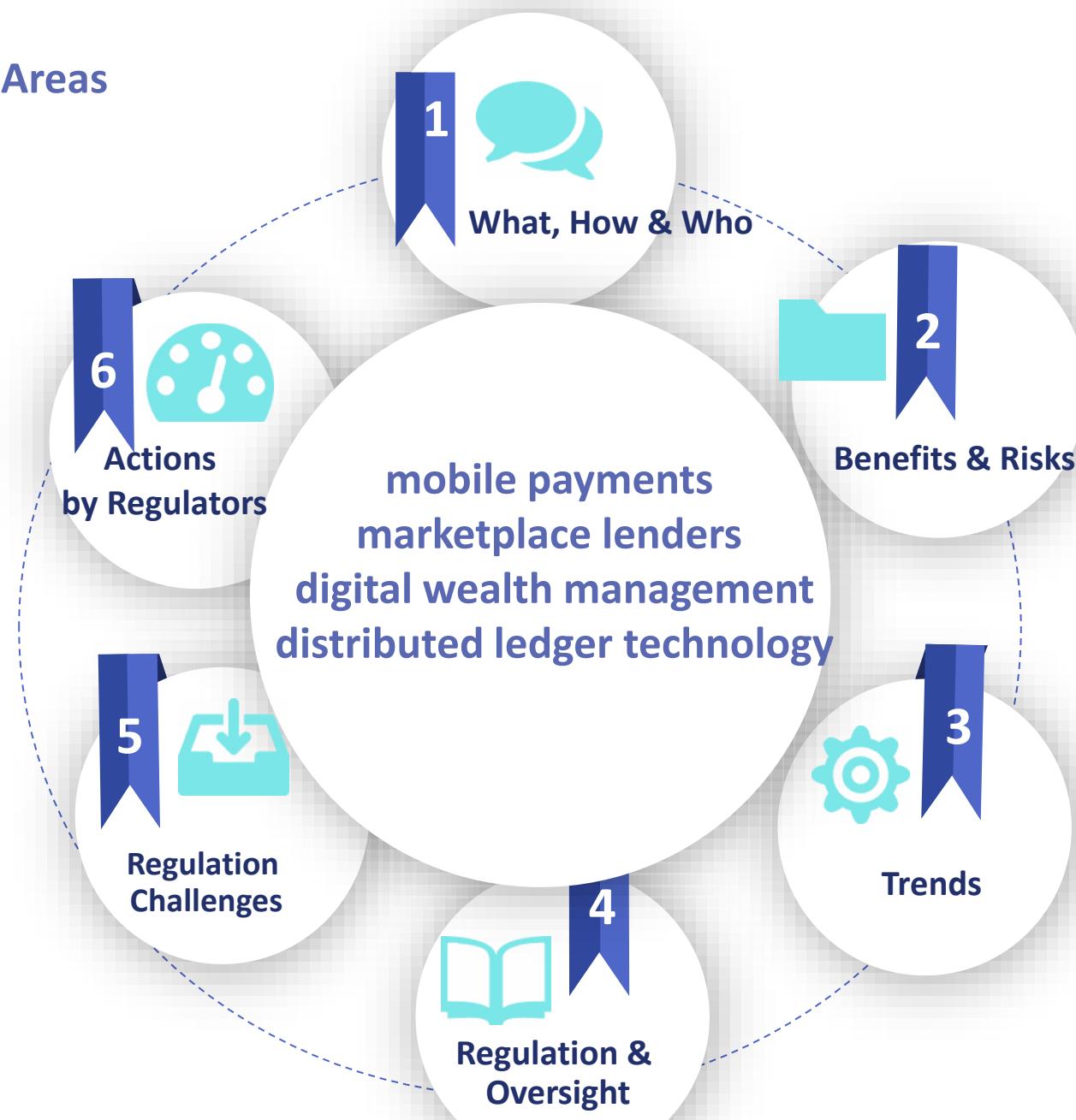
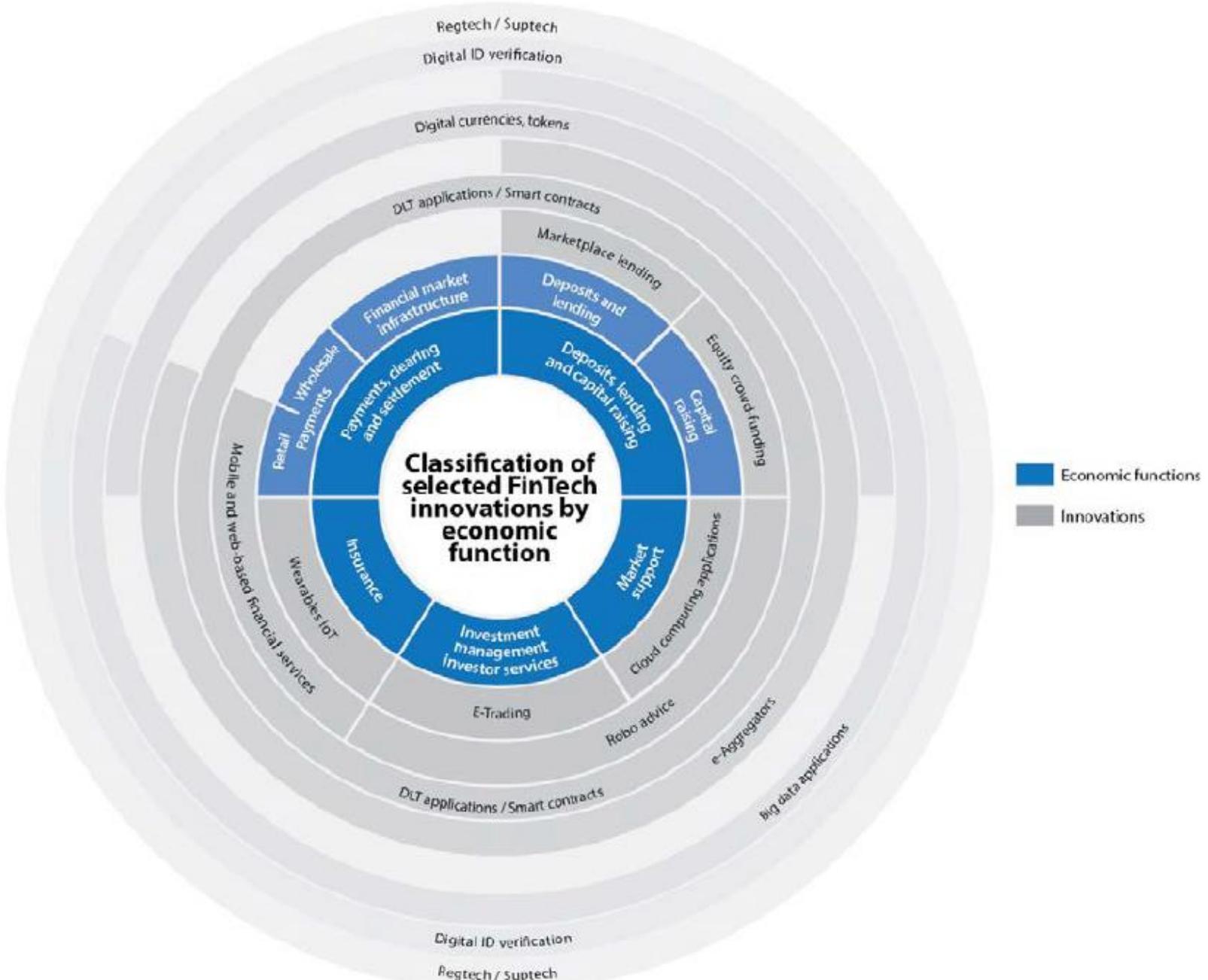


Figure 1: Stylised classification of selected FinTech innovations by economic function



Stylised
Classification of
Selected FinTech
innovations by
economic
function

Source: figure 1 from

"Financial Stability Implications from FinTech: Supervisory and Regulatory Issues that Merit Authorities' Attention, 27 June 2017, Financial Stability Board, <http://www.fsb.org/wp-content/uploads/R270617.pdf>

Benefits

- Decentralization and diversification
- Efficiency
- Transparency
- Access to, and convenience of , financial services



Microfinancial Risk

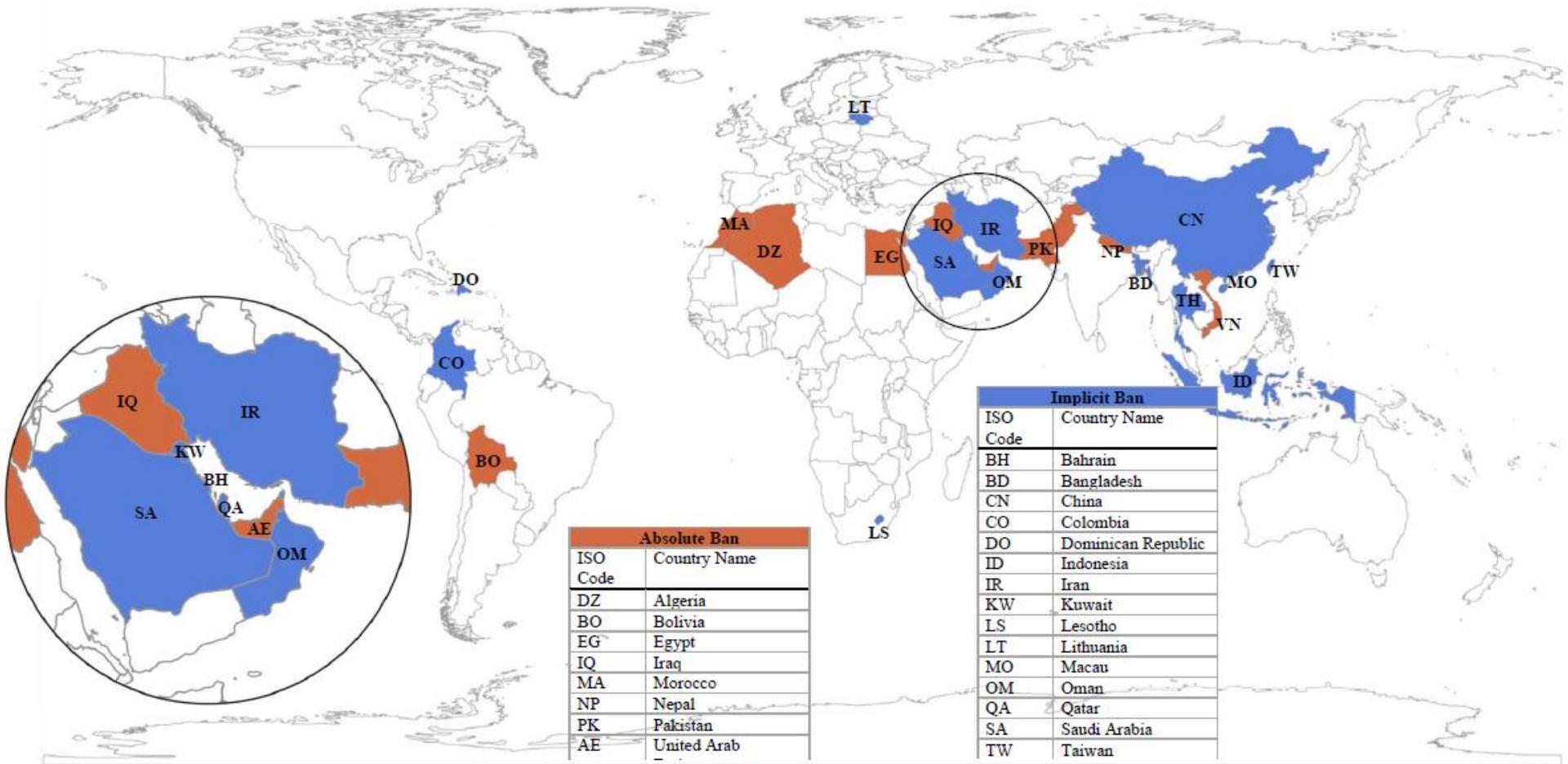
- Financial risk
 - Maturity mismatch
 - Liquidity mismatch
 - Leverage
- Operational risk
 - Governance process control
 - Cyber risks
 - Third-party reliance
 - Legal/regulatory risk
 - Business risk of critical FMIs



Macrofinancial Risk

- Contagion
- Procyclicality
- Excess volatility
- Systemic importance

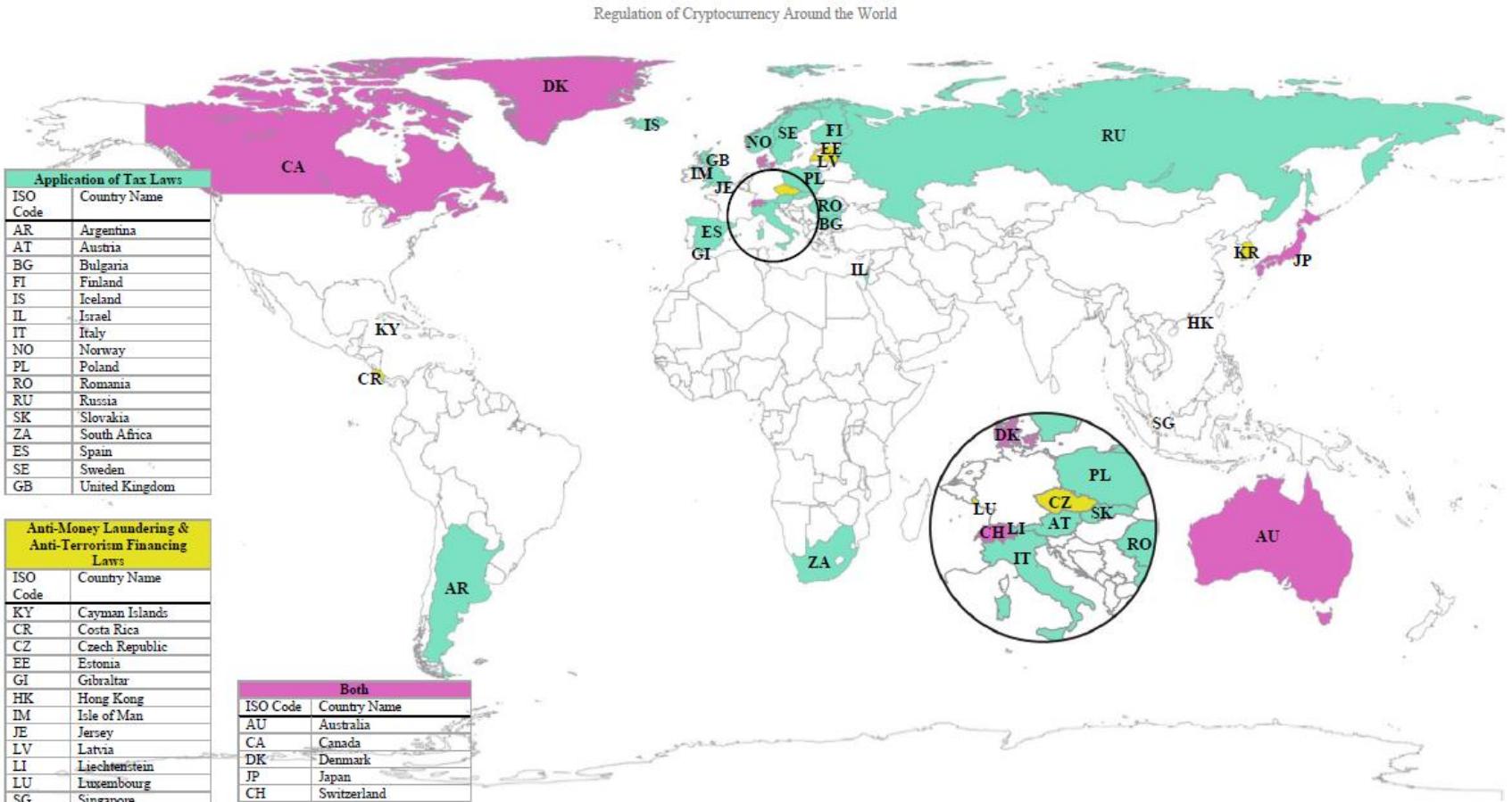




Legal Status of Cryptocurrencies

Source: Created by the Law Library of Congress based on information provided in this report.

Cryptocurrencies: FinTech Regulations



Regulatory Framework for Cryptocurrencies: Application of Tax Laws, Anti-Money Laundering/Anti-Terrorism Financing Laws, or Both

Source: Created by the Law Library of Congress based on information provided in this report.



Cryptocurrency Regulation

Australia

1	Application of Tax Law	akin to a barter arrangement, with similar tax Consequences	
 2	Application of Tax Law	Capital Tax GST	
3	AML/CTF	Anti-Money Laundering and Counter-Terrorism Financing Amendment Bill 2017	
 4	AML/CTF	digital currency exchanges will be required to enroll in a register maintained by AUSTRAC	

P2P Regulatory Approaches Around World

1. “Exempt/ unregulated” through lack of definition
2. Specific Regulation based on existing regulatory components
 - UK
2. Platforms regulated as an intermediary (market operator, broker)
 - Canada,
3. Platforms regulated as a bank
 - Germany, France
4. Securities issuance
 - USA (SEC) and state level
5. Prohibited
 - Japan, Israel)
6. MIS/CIS
 - Australia

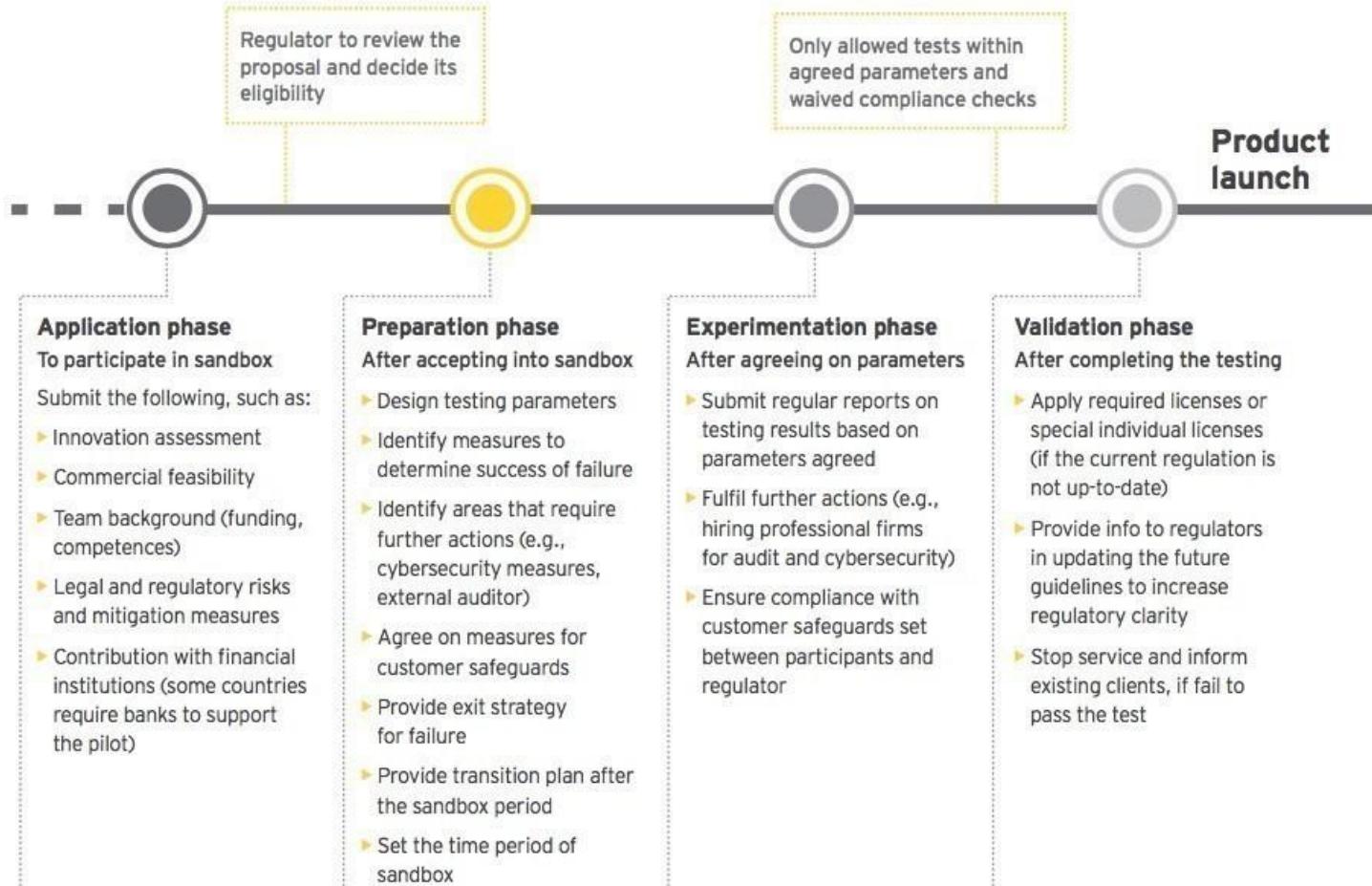
FinTech Sandboxes

“[A regulatory sandbox is] a framework set up by a financial sector regulator to allow small-scale, live testing of innovations by private firms in a controlled environment (operating under a special exemption, allowance, or other limited, time-bound exception) under the regulator’s supervision.”

Source: CGAP

Inside the regulatory sandbox

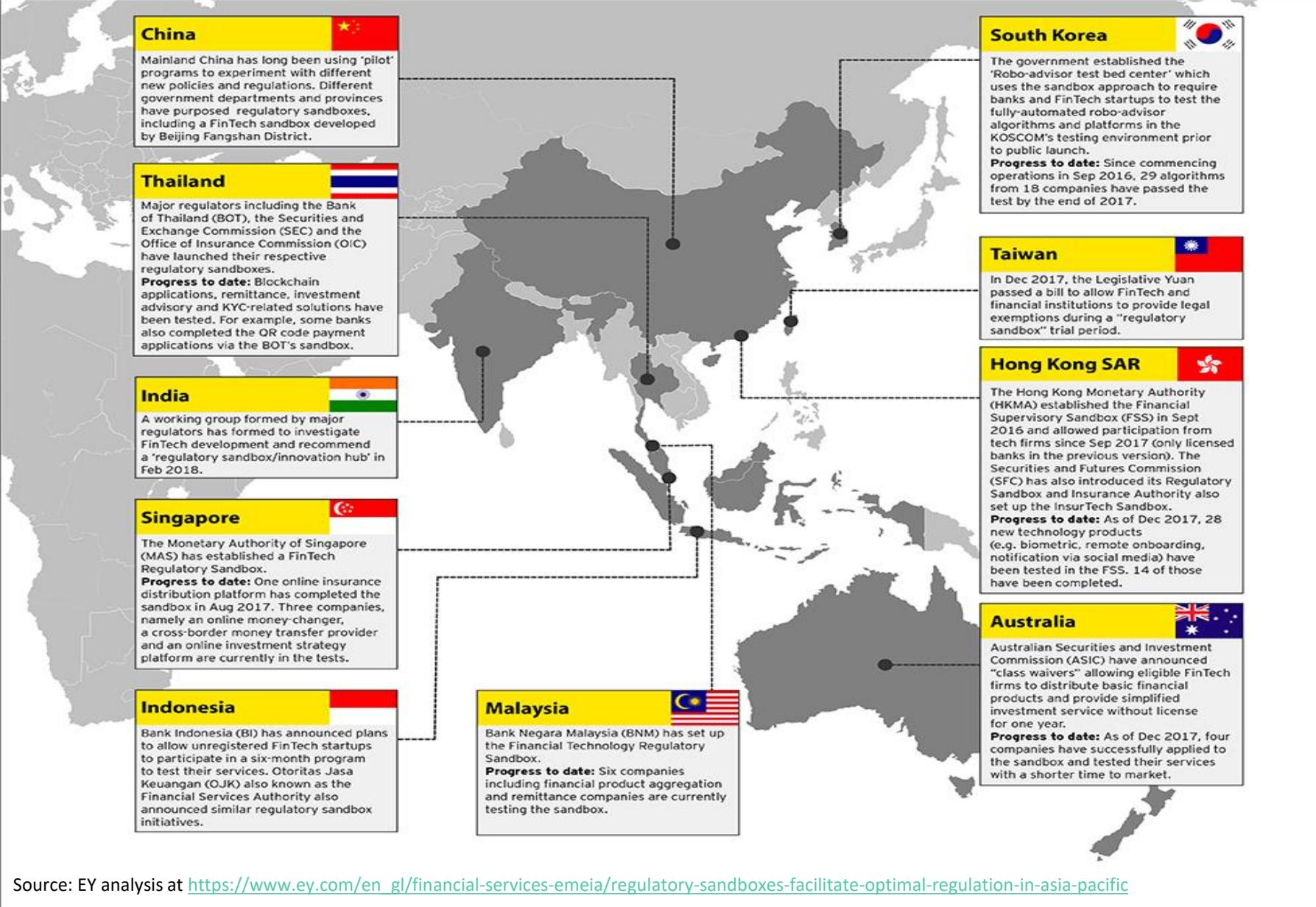
Most sandboxes have a similar operation model:



Source: EY Analysis.

FinTech Sandbox

The use of FinTech regulatory sandboxes across Asia-Pacific



APAC's regulatory sandboxes in action

Global FinTech Hub

Fintech Global Landscape: Asia and Americas Lead, Europe Follows



Note: The above yellow-numbered cities are the 7 Global Fintech Hubs, the blue-numbered cities are the 23 Regional Fintech Hubs, and the 25 unnumbered cities are the new leaders (Emerging Fintech Hubs)

Source: Sinai Lab from Academy of Internet Finance (AIF), Zhejiang University, and Hangzhou Moses Technology



浙江
互联网金融
研究院
ZHEJIANG UNIVERSITY
ACADEMY OF INTERNET FINANCE

司南研究室
Sinai Lab

剑桥
未来金融
研究所
UNIVERSITY OF
CAMBRIDGE
Judge Business School

浙江互联网金融联合会
铜板街
ZHEJIANG ASSOCIATION OF INTERNET FINANCE

Approaches to Regulating FinTech

Australia

ASIC+Hubs

- ASIC helps FinTech companies which licenses and regulations are applicable
 - Regulator Sandbox: FinTech companies test new products and services for up to 12 months without license



USA

OCC vs. States

- OCC: FinTech companies for special bank charters can be accepted
 - No single legal framework



China

Loose Regulation

- Regulatory sandbox: whole China
 - Some regulation has been implemented: ICOs are banned and cryptocurrency trading platforms are blocked



UK

FCA + Bridges

- FCA is working on a global sandbox
 - Has established FinTech bridges with Canada, China, Japan, South Korea, and Hong Kong SAR



Best Approaches to Regulating FinTech?

Australia

ASIC+Hubs

- Collaborative regulation can help FinTech companies navigate the regulatory landscape



USA

OCC vs. States

- Need consistent and clear regulatory authority



China

Loose Regulation

- Spark a boom of FinTech companies but also gives rise to scams and high-risk financial models



UK

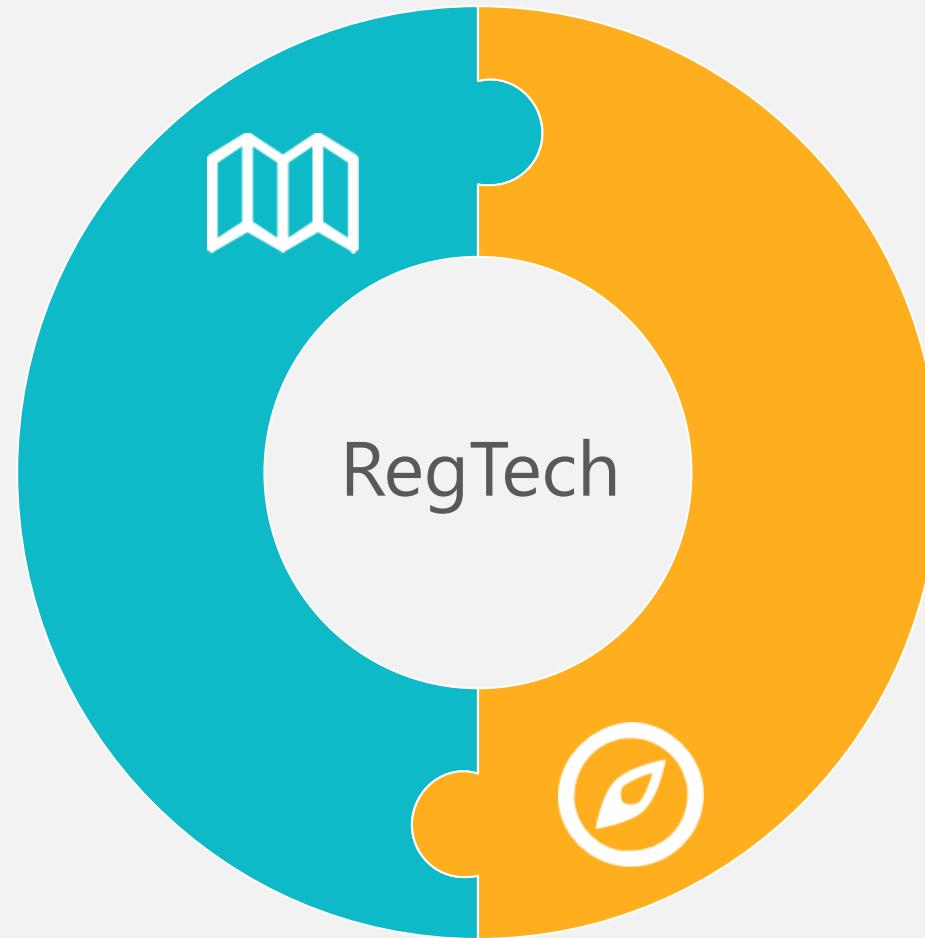
FCA + Bridges

- Global sandboxes with cross-border collaborations increase value of FinTech companies



The Best Approach RegTech?

Regulation



Technology

RegTech: adoption of new technologies to facilitate the delivery of regulatory requirements.

The Financial Conduct Authority (FCA), UK

RegTech Applications



Provides anti-fraud and risk management services for digital transactions by tracking payment entities.



A platform helps banks submit required regulatory reports without disruption to their architecture.



Offers identity verification (people in over 40 countries) for companies including Apple and Amazon : to comply with KYC and anti-money laundering rules.

Caution and Skepticism Around RegTech

